

VOSH PROGRAM DIRECTIVE: 12-248B**ISSUED:** 15 July 2014

SUBJECT: Electric Power Generation, Transmission and Distribution and Amendments, Parts 1910 and 1926; and Amendment to Electrical Protective Equipment standard, §1910.137

Purpose This directive transmits to field personnel consistent requirements for work performed under the Construction Industry, Subpart V of Part 1926, and General Industry standards for Electric Power Generation, Transmission and Distribution, §1910.269, and amended Electrical Protective Equipment, §1910.137.

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

Scope This directive applies to all VOSH personnel and specifically to Occupational Safety Enforcement and Consultation Services personnel.

References 79 FR 20316 (April 11, 2014)

Cancellation VOSH PD 12-223A (December 15, 2005); and
VOSH PD 12- 248A (April 1, 1995)

Effective Date 01 September 2014

Action Directors and managers shall assure that field personnel and employers understand and comply with the requirements of these standards.

C. Ray Davenport
Commissioner

Distribution: Commissioner of Labor and Industry
Assistant Commissioner-Programs
VOSH Directors and Managers
Legal Support & IMIS Support Staffs

Cooperative Programs Director
VOSH Compliance & Cooperative Programs Staff
OSHA Region III & Norfolk Area Offices

Attachment: 79 FR 20316 (April 11, 2014) or refer to link below:
http://www.osha.gov/FedReg_osha_pdf/FED20140411.pdf

I. Background.

Federal OSHA first adopted standards for the construction of power transmission and distribution lines and equipment in 1972 (Subpart V of Part 1926). Federal OSHA defines the term “construction work” in §1910.12(b) as “work for construction alteration, and/or repair, including painting and decorating.” The term “construction” is broadly defined in §1910.12(d) and existing §1926.950(a)(1) to include the original installation of , as well as the alteration, conversion, and improvement of electric power transmission and distribution lines and equipment.

On January 31, 1994, federal OSHA adopted §1910.269, the General Industry Electric Power Generation, Transmission, and Distribution standard, which is a companion standard to Subpart V of the Construction Industry standards. Section 1910.269 applies to the operation and maintenance of electric power generation, transmission, and distribution installations, and addresses work to which Subpart V did not apply. At the time it was promulgated, §1910.269 was also based on the latest technology and national consensus standards.

The Safety and Health Codes Board adopted federal OSHA’s final rule for Electrical Power Generation, Transmission, and Distribution, §1910.269, along with an amendment to the Electrical Protective Equipment standard, §1910.137, on April 25, 1994, with an effective date of July 1, 1994, except for the training requirements for the Electrical Power Generation, Transmission, and Distribution standard, §1910.269(a)(2), which had an effective date of January 31, 1995.

On June 15, 2005, federal OSHA published a proposed rule (the Subpart V proposal) to revise the Construction Industry standard for Electric Power Transmission and Distribution work (Part 1926, Subpart V) and the General Industry standards for Electric Power Generation, Transmission, and Distribution (§1910.269).

On June 5, 2014, the Safety and Health Codes Board adopted federal OSHA’s Final Rule for Electric Power Generation, Transmission, and Distribution and Electrical Protective Equipment, Part 1910, General Industry, and Part 1926, Construction Industry, with an effective date of September 1, 2014, and repealed the Virginia Unique regulation, 16VAC25-155, General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry – Subpart V (§1926.950 (c)(1)(i)), which was no longer necessary.

II. Summary.

Federal OSHA adopted a new Construction Industry standard on electrical protective equipment, §1926.97, and revised the standard on the construction of electric power transmission and distribution lines and equipment, Part 1926, Subpart V. Federal OSHA also revised the General Industry counterparts to these two Construction Industry standards, §§ 1910.137 and 1910.269, respectively. Finally, federal OSHA revised its General Industry standard on foot protection, §1910.136, to require employers to ensure that each affected employee uses protective footwear when the use of protective footwear will protect the affected employee from an electrical hazard, such as a static-discharge or electric-shock hazard, that remains after the employer takes other necessary protective measures.

These revisions make the Construction Industry standard more consistent with comparable General Industry standards. The final rules for General Industry and the Construction Industry include new or revised provisions on host employers and contractors, training, job briefings, fall protection, insulation

and working position of employees working on or near live parts, minimum approach distances, protection from electric arcs, deenergizing transmission and distribution lines and equipment, protective grounding, operating mechanical equipment near overhead power lines, and working in manholes and vaults.

The new provisions on host employers and contractors include requirements for host employers and contract employers to exchange information on hazards and on the conditions, characteristics, design, and operation of the host employer's installation. These new provisions also include a requirement for host employers and contract employers to coordinate their work rules and procedures to protect all employees.

The new standard also revises the General Industry and Construction Industry standards for electrical protective equipment, §1926.97. The new standard for electrical protective equipment, which matches the corresponding General Industry standard, applies to all Construction Industry work and replaces the incorporation of out-of-date consensus standards with a set of performance-oriented requirements that is consistent with the latest revisions of the relevant consensus standards. The final Construction Industry rule also includes new requirements for the safe use and care of electrical protective equipment to complement the equipment design provisions. Both the General Industry and Construction Industry standards for electrical protective equipment will include new requirements for equipment made of materials other than rubber.

VOSH will use the same delayed compliance deadlines as the federal date schedule for the phase-in period for this final rule. The additional time granted to employers will serve to reduce the transitional costs associated with the final rule.

Federal OSHA has also included numerous comparable appendices in §1910.269 and in Subpart V of Part 1926 of the final rule. Among other things, these comparable appendices provide the following:

- Information relating to the determination of appropriate minimum approach distances;
- Information on the inspection and testing of wood poles;
- Guidance on the selection of protective clothing and other protective equipment for employees exposed to flames or electric arcs;
- Tables for estimating incident-energy levels based on voltage, fault current, and clearing times; and
- References to additional sources of information that supplement the requirements of Subpart V.

The new federal final rule for Electric Power Generation, Transmission, and Distribution and Electrical Protective Equipment now provides comprehensive and uniform levels of worker protections across industries that previously were lacking in this standard and were addressed by the Board in 2004 through the adoption of the Virginia Unique regulation: 16VAC25-155, General Requirements for Clearances, Construction of Electric Transmission and Distribution Lines and Equipment, Construction Industry – Subpart V (§1926.950 (c)(1)(i)). Since this Virginia Unique regulation is no longer necessary, it was repealed; however, the Virginia unique standard for Telecommunications, 16VAC25-75, remains in effect as it was not covered by this action.

III. Implementation Schedule.

Requirement	Subpart V	§1910.269	VOSH Compliance Date
Fall protection must be used by a qualified employee climbing or changing location on poles, towers, or similar structures unless the employer can demonstrate that the climbing with fall protection is infeasible or creates a greater hazard than climbing or changing location without it.	§1926.954(b)(3)(iii)(C)	(g)(2)(iv)(C)(3)	April 1, 2015
Work-positioning systems must be rigged so that an employee can free fall no more than 0.6 m (2 ft).	§1926.954(b)(3)(iv)	(g)(2)(iv)(D)	April 1, 2015
Until the compliance deadline, employers may continue to use the minimum approach distances in existing Subpart V and 1926.269 for voltages of 5.1 kilovolts and more. After the compliance deadline, employers must determine the maximum anticipated per-unit transient overvoltage, phase-to-ground in accordance with 1926.960(c)(1)(ii) and 1910.269(l)(3)(ii) and must establish minimum approach distances in accordance with 1926.960(c)(1)(i) and 1910.269(l)(3)(i).	§1926.960(c)(1) and Table V-2	(l)(3) and Table R-3	April 1, 2015
The employer must make a reasonable estimate of the incident heat energy to which the employee would be exposed.	§1926.960(g)(2)	(l)(8)(ii)	Jan. 1, 2015
The employer must ensure that the outer layer of clothing, except for clothing not required to be arc rated, is flame resistant when the estimated incident heat energy exceeds 2.0 cal/cm ² .	§1926.960(g)(4)(iv)	(l)(8)(iv)(D)	April 1, 2015
The employer must ensure that employees with exposure to electric-arc hazards wear protective clothing and other protective equipment with an arc rating greater than or equal to the estimated heat energy whenever that estimate exceeds 2.0 cal/cm ² .	§1926.960(g)(5)	(l)(8)(v)	April 1, 2015

**Electric Power Generation, Transmission, and Distribution, and
Electrical Protective Equipment, Parts 1910 and 1926; Final Rule**

As Adopted by the
Safety and Health Codes Board

Date: June 5, 2014



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: September 1, 2014

**Electric Power Generation, Transmission, and Distribution, and
Electrical Protective Equipment, Parts 1910 and 1926; Final Rule**

**Electric Power Generation, Transmission, and Distribution; and Electrical Protective Equipment
Part 1910 - General Industry and Part 1926 – Construction Industry**

Part 1910 – General Industry, 16VAC25-90-	Part 1926 Construction Industry, 16VAC25-175-
Subpart I – Personal Protective Equipment	Subpart E - Personal Protective and Life Saving Equipment
1910.136, Foot Protection	1926.97, Electrical Protective Equipment
1910.137, Electrical Protective Equipment	1926.500, Scope, Application, Definitions Applicable to Subpart
<i>Appendix B to Subpart I of Part 1910 –Nonmandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection</i>	Subpart V –Electric Power Transmission and Distribution
Subpart R – Special Industries	1926.950, General
1910.269, Electric Power Generation, Transmission, and Distribution	1926.951, Medical Services and First Aid
<i>Appendices to §1910.269</i>	1926.952, Job Briefing
<i>Appendix A - Flow Charts</i>	1926.953, Enclosed Spaces
<i>Appendix A-1 - Application of §1910.269 and Subpart S of this Part to the Design of Electrical Installations</i>	1926.954, Personal Protective Equipment
<i>Appendix A-2 - Application of §1910.269 and Subpart S of this Part to Electrical Safety-Related Work Practices</i>	1926.955, Portable Ladders and Platforms
<i>Appendix A-3 - Application of §1910.269 and Subpart S of this Part to Tree-Trimming Operations</i>	1926.956, Hand and Portable Power Equipment
<i>Appendix A-4 to §1910.269 – Application of §§1910.147, 1910.269 and 1910.333</i>	1926.957, Live-line tools
<i>Appendix A-5 to §1910.269 – Application of §§1910.146 and 1910.269 to Permit-Required Confined Spaces</i>	1926.958, Materials Handling and Storage
<i>Appendix B –Working on Exposed Energized Parts</i>	1926.959, Mechanical Equipment
<i>Appendix C –Protection From Hazardous Differences in Electric Potential</i>	1926.960, Working on or near Exposed Energized Parts
<i>Appendix D –Methods of Inspecting and Testing Wood Poles</i>	1926.961, Deenergizing lines and Equipment for Employee Protection
<i>Appendix E – Protection From Flames and Electric Arcs</i>	1926.962, Grounding for the Protection of Employees
<i>Appendix F –Work-Positioning Equipment Inspection Guidelines</i>	1926.963, Testing and Test Facilities
<i>Appendix G – Reference Documents</i>	1926.964, Overhead Lines and Live-line Barehand Work
Subpart S – Electrical	1926.965, Underground Electrical Installations
1910.331, Scope	1926.966, Substations
1910.339, Definitions Applicable to this Subpart	1926.967, Special Conditions
	1926.968, Definitions
	<i>Appendices to Subpart V of Part 1926</i>
	<i>Appendix A -Reserved</i>
	<i>Appendix B -Working on Exposed Energized Parts</i>
	<i>Appendix C -Protection From Hazardous Differences in Electric Potential</i>
	<i>Appendix D -Methods of Inspecting and Testing Wood Poles</i>
	<i>Appendix E - Protection From Flames and Electric Arcs</i>
	<i>Appendix F –Work-Positioning Equipment Inspection Guidelines</i>
	<i>Appendix G – Reference Documents</i>
	Subpart X – Stairways and Ladders
	1926.1053, Ladders
	Subpart CC – Cranes and Derricks in Construction
	1926.1400, Scope
	1926.1410, Power Line Safety (All Voltages) –Equipment Operations Closer than the Table A Zone

When the regulations, as set forth in the Final Rule for Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment, Parts 1910 and 1926, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

<u>Federal Terms</u>	<u>VOSH Equivalent</u>
OSHA	VOSH
Federal Agency	State Agency
Assistant Secretary	Commissioner of Labor and Industry
Regional Administrator	Assistant Commissioner
Area Director	Regional Director VOSH Program Director
Area Office/Regional Office	Regional Office
Regional Solicitor	Attorney General or VOSH Division of Legal Support (DLS)
Office of Statistics	VOSH Research and Analysis
29 CFR	VOSH Standard
Compliance Safety and Health Officer (CSHO)	CSHO
Agency	Department
July 10, 2014	September 1, 2014

(Please refer to Section V for implementation schedule of various provisions)

To access the Final Rule for Electric Power Generation, Transmission, and Distribution, Parts 1910 and 1926; Electrical Protective Equipment, §1926.97, please click on the link below:

http://www.osha.gov/FedReg_osha_pdf/FED20140411.pdf